

NASA TECH BRIEF



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IR Vidicon Scanner Monitors Many Test Points

An IR (infrared) scanner is considered as a replacement for hardwire and switching elements in a test system that involves many signal paths from transducers to a central evaluation unit. Each subsystem of the equipment under test would contain an indicator panel mounting IR sources (such as gallium arsenide diodes whose radiation varies in proportion to their electrical inputs) that will reflect each individual test point parameter and its changes in state.

The scanner, an IR-sensitive vidicon, is used to "look at" the indicator panels in turn and pick up the level of radiation from each IR source mounted thereon. These sources can indicate pressure, temperature, strain, and so on throughout a large and complex structure such as a spacecraft or space vehicle.

Note:

This development is in conceptual stage only, and as of date of publication of this Tech Brief, neither a model nor prototype has been constructed.

Patent status:

No patent action is contemplated by NASA.

Source: Robert J. Fortier
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